



Natural Resources Conservation Service
375 Jackson Street, Suite 600
St. Paul, MN 55101-1854

Phone: (651) 602-7900
FAX: (651) 602-7914

INTERPRETING THE “SENSITIVE WATERS 2005 PROJECT” FOR CONSERVATION PLANNING AND/OR PROGRAM EVALUATIONS

To access the project, open ArcView, then click on File – Open, and then navigate to the following folder:

“F:\geodata\project_data\nrcs\SensitiveWaters2005\sensitive_waters2005.apr”

A project has also been provided for those using ArcGIS. The path name, above, is the same; however, the project name is: sensitive_waters2005.mxd

The project contains three GIS views as well as pdf files:

- ◆ Sensitive Waters 2005 View
- ◆ Public Water Supply Sources/Wellhead Protection Areas View
- ◆ Source Water Assessment Areas/Drinking Water Supply Management Areas View
- ◆ PDF files of individual Drinking Water Supply Management Areas

◆ SENSITIVE WATERS 2005

This view can be used to:

- ◆ *Establish the relationship between a conservation planning unit and an impaired waterbody*
- ◆ *Evaluate Environmental Quality Incentives Program (EQIP) applications. Applicants with land within delineated Minnesota Pollution Control Agency (MPCA) or NRCS Hydrologic Unit Areas (HUAs) boundaries or with land draining to nutrient impaired lakes qualify for “sensitive waterbody” points if a practice related to the turbidity, fecal coliform or nutrient impairment will be implemented.*

Select portions of the MPCA 2004 impaired waters lists were used to create this view. The view focuses on and shows turbidity and fecal coliform impaired stream reaches and nutrient impaired lakes. Additional impaired stream reaches are also shown without defining the impairment and additional impaired lakes are shown along with the impairment. The view also identifies HUAs that may impact a turbidity or fecal coliform impaired stream reach (*shown as “PCA’s 2004 Impaired Watersheds”*) and additional HUAs that may also impact the impaired reach (*shown as “NRCS’ 2004 Impaired Watersheds (Add’l)”*). HUAs impacting an impaired “lake” are not delineated.

◆ PUBLIC WATER SUPPLY SOURCES/WELLHEAD PROTECTION AREAS (WPAS)

(NOTE: FOR NATIONAL SECURITY PURPOSES THIS INFORMATION IS NOT FOR RELEASE TO OTHERS.)

This view can be used to identify water supplies with WPAs. WPA boundaries are sometimes used in CRP applicant evaluations. FSA restricts eligibility to a 2000 foot radius around the well regardless of WPA size (provided the radius falls within the WPA). The GIS view does not show the 2000 foot radius, but the Minn. Department of Health (MDH) provides detailed maps to FSA showing WPA and 2000 foot radius boundaries.

MDA data was used to develop this view. It contains the following information:

The Natural Resources Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment.

An Equal Opportunity Provider and Employer

1. **Public Water Supply Systems (PWSS).** There are more than 7,000 public water supplies in Minnesota. Some have detailed Wellhead Protection Areas (WPAs) delineated for them. The rest have preliminary Source Water Protection Areas delineated for them (View 3).
2. **Active/Approved Sources for WPA.** This layer identifies those PWSSs that have had Wellhead Protection Areas (WPAs) delineated for them.
3. **WPA boundaries.** These are the boundaries of the WPAs identified in 2 above. WPAs are delineated after extensive studies by the water supplier and are hydrologic or irregular in appearance. This layer shows WPA boundaries for approximately 300 public wells. These 300 also have Drinking Water Supply Management Areas delineated for them (discussed in the next view). The WPAs for additional non-community public water systems such as resorts, restaurants and churches are also shown. These additional WPAs are comprised of a 200 foot radius around the well. You need to zoom in several times for these small WPAs to appear. ***Note: The 200 foot radius WPAs only appear in this view and not the view described below.***

◆ SOURCE WATER ASSESSMENT AREAS (SWAAS)/DRINKING WATER SUPPLY MANAGEMENT AREAS (DWSMAS)

(NOTE: FOR NATIONAL SECURITY PURPOSES THIS INFORMATION IS NOT FOR RELEASE TO OTHERS.)

This view can be used to:

- ◆ *Identify fields needing a nitrogen loss potential evaluation when developing nutrient management plans (Table 1 in the nutrient management (code 590) standard).*
- ◆ *Evaluate EQIP applications. Applicants with fields located within DWSMAs having moderate or greater vulnerability or fields located within vulnerable SWAAs are eligible for “sensitive waterbody” points if the applicant will be implementing either nutrient (590) or pest (595) management.*
- ◆ *Evaluate CSP applications. Fields located within high or highly vulnerable DWSMAs or vulnerable SWAAs should have one or more N-BMPs applied to them.*

This project view shows all SWAAs including those SWAAs currently considered vulnerable to contamination. Approximately 300 DWSMAs and their vulnerability to contamination are also shown. 200 foot radii Wellhead Protection Areas (WPAs) do not have delineated DWSMAs and are only found in the view described above.

1. **Source Water Assessment Areas.** SWAAs are based on preliminary MDH assessments of all public water supplies. The boundaries change to DWSMA or WPA boundaries upon completion of those detailed analyses.
2. **Drinking Water Supply Management Areas.** DWSMAs are Wellhead Protection Areas with boundaries expanded to definable features such as roads, section lines etc. This makes it easier to identify the area. This GIS view shows these DWSMAs. Detailed pdf files for individual DWSMAs and vulnerabilities are also available:
 - ◆ Click on the “identify” button after locating a DWSMA of interest and find the dws_id number for the water supply of interest. (e.g. the dws_id number for a St. Peter Well CJDN is 2).
 - ◆ Minimize Arcview and go to F:\geodata\hydrography\WellheadProtectionAreas\pdf. Locate a pdf file of interest by looking at the last number(s) in the pdf file code and match to the same dws_id number in the GIS table. (e.g. the pdf file code for St. Peter CJDN is SWP00002.pdf).